URS

January 17, 2011

Duke Energy
Miami Fort Generating Station
11021 Brower Road
North Bend, OH 45052

Attention: Ms. Sue Wallace
Chemical Engineer

Re: Results – **January 2011**
Low-Level Mercury Sampling
Miami Fort Generating Station
North Bend, Ohio

In accordance with your request, URS prepared the following letter report transmitting low-level mercury test results for samples collected at the Miami Fort Generating Station located in North Bend, Ohio.

The scope of work involved the sampling of intake and discharge waters from the following sources and analysis of those samples for low-level mercury.

1. River Intake
2. Station 601 (WWT Influent)
   [Samples were collected at this station one detention time before samples collected at Outfall 608]
3. Outfall 608 (WWT Effluent)
   [Samples were collected at this outfall one detention time after samples collected at station 601]
4. Outfall 002 (Pond B Discharge)

Each sample was collected following the required Method 1669: *Sampling Ambient Water for Determination of Trace Metals at EPA Water Quality Criteria Levels* (Sampling Method) and analyzed by Method 1631. At the request of Duke Energy, total metal mercury samples were collected from Station 601 and analyzed by Method 7470A. Also at the request of Duke Energy, a dissolved low-level mercury sample was collected by Method 1669 from Outfall 608 and analyzed by Method 1631. The collected dissolved sample was filtered at the laboratory utilizing 0.45 micron filtration.

Field staff from URS' Cincinnati office conducted the sampling and TestAmerica Laboratories Inc. located in North Canton, Ohio performed the analytical procedures. The analytical procedures included the analyses of a collected sample and duplicate sample (duplicates collected at Outfall 608 and Outfall 002), field blank (field blanks collected at the River Intake, Outfall 608, and Outfall 002), and trip blank.

URS Corporation
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Tel: 513.651.3440
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The results from the **January 5 and 6, 2011** sampling event are presented in the attached Table 1. A copy of the laboratory report is enclosed with this letter.

--ooOoo--

URS is pleased to provide continued assistance to Duke Energy in the execution of their environmental monitoring requirements. If there are any questions regarding the content of this report, please do not hesitate to contact the undersigned.

Sincerely,

URS Corporation

Michael A. Wagner
Project Manager

Dennis P. Connair, C.P.G.
Principal

MAW/DPC/Duke Energy-MFS LL Hg 2011
Job No. 14949813

TABLE 1

ANALYTICAL RESULTS
LOW-LEVEL MERCURY
RIVER INTAKE, STATION 601, OUTFALL 608, AND OUTFALL 002 (POND B)

DUKE ENERGY - MIAMI FORT STATION
NORTH BEND, OHIO

	Date Sampled / Results (ng/L, parts per trillion)						
Sample ID	**8/2/10**	**9/1/10**	**10/4/10**	**11/1/10**	**12/1/10**	**1/5/11**	**2/xx/2011**
River Intake	1.9	0.86	1.1	1.1	3.0	9.7	
Station 601 (7)	48,200	391,000	187,000	408,000	380,000	315,000	
Station 601 (7)*	14,000	8,600	23,200	350,000	494,000	6,100	
Station 601 (7)* [duplicate]	13,000	Not Collected	Not Collected	378,000	489,000	6,100	
Station 601 (8)	NSC	428,000	285,000	247,000	184,000	UDFS	
Station 601 (8)*	NSC	8,300	30,600	104,000	490,000	UDFS	
Station 601 (8)*[duplicate]	NSC	Not Collected	28,400	Not Collected	Not Collected	UDFS	
Outfall 608	420	631	440	248	345	97.2	
Outfall 608 [duplicate]	364	650	449	254	333	102	
Outfall 608 [dissolved, 0.45 micron]	Not Collected	83	70	124	81.7	0.91	
APB-002	1.8	2.3	3.1	2.9	4.0	3.8	
APB-002 [duplicate]	1.3	1.9	2.8	3.0	3.6	3.4	
Field Blank (RI-FB)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Field Blank (WWT-FB)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Field Blank (AP-FB)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Trip Blank	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Samples collected by URS
Samples analyzed by TestAmerica of North Canton, Ohio
NSC - No Sample Collected (Unit's wastewater was not being processed at the time of sample collection)
UDFS - Unit down for service, no samples collected.
* = Total mercury analysis utilizing Method 7470A [results converted from ug/L (parts per billion) to ng/L]

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

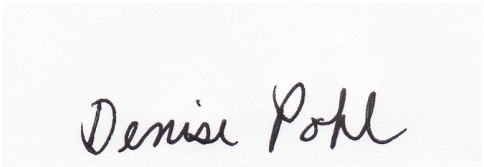
MIAMI FORT STATION LLHG

Lot #: A1A070542

Sue Wallace

Duke Energy Corporation
PO Box 5385
Cincinnati, OH 45201

TESTAMERICA LABORATORIES, INC.



Approved for release.
Denise Pohl
Project Manager
1/17/2011 8:03 AM

Denise Pohl
Project Manager
denise.pohl@testamericainc.com

January 14, 2011

CASE NARRATIVE

A1A070542

The following report contains the analytical results for twelve water samples and one quality control sample submitted to TestAmerica North Canton by Cinergy from the MIAMI FORT STATION LLHG Site. The samples were received January 07, 2011, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Candance Bonham, Mike Wagner, and Sue Wallace on January 13, 2011. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

All parameters were evaluated to the reporting limit.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Denise Pohl, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 8.6°C.

See TestAmerica's Cooler Receipt Form for additional information.

METALS

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

EXECUTIVE SUMMARY - Detection Highlights

A1A070542

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
RI 01/05/11 17:25 002				
Mercury	9.7	0.50	ng/L	CFR136A 1631E
601 (7) WWT 01/05/11 17:45 003				
Mercury	315000	10000	ng/L	CFR136A 1631E
601 (7) WWT TOT 01/05/11 17:50 004				
Mercury	6.1	0.20	ug/L	SW846 7470A
601 (7) WWT TOT DUP 01/05/11 17:55 005				
Mercury	6.1	0.20	ug/L	SW846 7470A
608 WWT 01/06/11 07:20 007				
Mercury	97.2	5.0	ng/L	CFR136A 1631E
608 WWT DUP 01/06/11 07:25 008				
Mercury	102	5.0	ng/L	CFR136A 1631E
608 WWT DISS 01/06/11 07:30 009				
Mercury - DISSOLVED	0.91	0.50	ng/L	CFR136A 1631E
OUTFALL 002 01/06/11 08:05 011				
Mercury	3.8	0.50	ng/L	CFR136A 1631E
OUTFALL 002 DUP 01/06/11 08:10 012				
Mercury	3.4	0.50	ng/L	CFR136A 1631E

ANALYTICAL METHODS SUMMARY

A1A070542

PARAMETER	ANALYTICAL METHOD
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Mercury, Low Level Mercury, CVA Fluorescence	CFR136A 1631E

References:

CFR136A "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A1A070542

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MC5W7	001	RI FB	01/05/11	17:20
MC5XC	002	RI	01/05/11	17:25
MC5XE	003	601 (7) WWT	01/05/11	17:45
MC5XG	004	601 (7) WWT TOT	01/05/11	17:50
MC5XH	005	601 (7) WWT TOT DUP	01/05/11	17:55
MC5XK	006	608 WWT FB	01/06/11	07:15
MC5XM	007	608 WWT	01/06/11	07:20
MC5XN	008	608 WWT DUP	01/06/11	07:25
MC5XP	009	608 WWT DISS	01/06/11	07:30
MC5XT	010	OUTFALL 002 FB	01/06/11	08:00
MC5XW	011	OUTFALL 002	01/06/11	08:05
MC5XX	012	OUTFALL 002 DUP	01/06/11	08:10
MC5X1	013	TRIP BLANK	01/05/11	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Duke Energy Corporation

Client Sample ID: RI FB

TOTAL Metals

Lot-Sample #...: A1A070542-001 **Matrix.....:** WQ
Date Sampled...: 01/05/11 17:20 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	ND	0.50	ng/L	CFR136A 1631E	01/12-01/13/11	MC5W71AA
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: RI

TOTAL Metals

Lot-Sample #...: A1A070542-002 **Matrix.....:** WG
Date Sampled...: 01/05/11 17:25 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	**9.7**	**0.50**	**ng/L**	**CFR136A 1631E**	**01/12-01/13/11**	**MC5XC1AA**
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: 601 (7) WWT

TOTAL Metals

Lot-Sample #...: A1A070542-003 **Matrix.....:** WG
Date Sampled...: 01/05/11 17:45 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	**315000**	**10000**	**ng/L**	**CFR136A 1631E**	**01/12-01/13/11**	**MC5XE1AA**
		Dilution Factor: 20000				

Duke Energy Corporation

Client Sample ID: 601 (7) WWT TOT

TOTAL Metals

Lot-Sample #...: A1A070542-004 **Matrix.....:** WG
Date Sampled...: 01/05/11 17:50 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1010015						
Mercury	**6.1**	**0.20**	**ug/L**	**SW846 7470A**	**01/10-01/11/11**	**MC5XG1AA**
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: 601 (7) WWT TOT DUP

TOTAL Metals

Lot-Sample #...: A1A070542-005 **Matrix.....:** WG
Date Sampled...: 01/05/11 17:55 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1010015						
Mercury	**6.1**	**0.20**	**ug/L**	**SW846 7470A**	**01/10-01/11/11**	**MC5XH1AA**
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: 608 WWT FB

TOTAL Metals

Lot-Sample #...: A1A070542-006 **Matrix.....:** WQ
Date Sampled...: 01/06/11 07:15 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	ND	0.50	ng/L	CFR136A 1631E	01/12-01/13/11	MC5XK1AA
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: 608 WWT

TOTAL Metals

Lot-Sample #...: A1A070542-007 **Matrix.....:** WG
Date Sampled...: 01/06/11 07:20 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	**97.2**	**5.0**	**ng/L**	**CFR136A 1631E**	**01/12-01/13/11**	**MC5XM1AA**
		Dilution Factor: 10				

Duke Energy Corporation

Client Sample ID: 608 WWT DUP

TOTAL Metals

Lot-Sample #...: A1A070542-008 **Matrix.....:** WG
Date Sampled...: 01/06/11 07:25 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	**102**	**5.0**	**ng/L**	**CFR136A 1631E**	**01/12-01/13/11**	**MC5XN1AA**
		Dilution Factor: 10				

Duke Energy Corporation

Client Sample ID: 608 WWT DISS

DISSOLVED Metals

Lot-Sample #...: A1A070542-009 **Matrix.....:** WG
Date Sampled...: 01/06/11 07:30 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	**0.91**	**0.50**	**ng/L**	**CFR136A 1631E**	**01/12-01/13/11**	**MC5XP1AA**
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: OUTFALL 002 FB

TOTAL Metals

Lot-Sample #...: A1A070542-010 **Matrix.....:** WQ
Date Sampled...: 01/06/11 08:00 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	ND	0.50	ng/L	CFR136A 1631E	01/12-01/13/11	MC5XT1AA
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: OUTFALL 002

TOTAL Metals

Lot-Sample #...: A1A070542-011 **Matrix.....:** WG
Date Sampled...: 01/06/11 08:05 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	**3.8**	**0.50**	**ng/L**	**CFR136A 1631E**	**01/12-01/13/11**	**MC5XW1AA**
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: OUTFALL 002 DUP

TOTAL Metals

Lot-Sample #...: A1A070542-012 **Matrix.....:** WG
Date Sampled...: 01/06/11 08:10 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	**3.4**	**0.50**	**ng/L**	**CFR136A 1631E**	**01/12-01/13/11**	**MC5XX1AA**
		Dilution Factor: 1				

Duke Energy Corporation

Client Sample ID: TRIP BLANK

TOTAL Metals

Lot-Sample #...: A1A070542-013 **Matrix.....:** WQ
Date Sampled...: 01/05/11 **Date Received..:** 01/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1012102						
Mercury	ND	0.50	ng/L	CFR136A 1631E	01/12-01/13/11	MC5X11AA
		Dilution Factor: 1				

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

QUALITY CONTROL SECTION

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A070542 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1A100000-015 **Prep Batch #...:** 1010015						
Mercury	ND	0.20	ug/L	SW846 7470A	01/10-01/11/11	MC6PD1AH
		Dilution Factor: 1				
MB Lot-Sample #: A1A120000-102 **Prep Batch #...:** 1012102						
Mercury	ND	0.50	ng/L	CFR136A 1631E	01/12-01/13/11	MC8011AA
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: A1A070542 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1A120000-102 **Prep Batch #...:** 1012102						
Mercury	ND	0.50	ng/L	CFR136A 1631E	01/12-01/13/11	MC8011AD
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A070542 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1A100000-015 **Prep Batch #...:** 1010015					
Mercury	108	(81 - 123)	SW846 7470A	01/10-01/11/11	MC6PD1A3
		Dilution Factor: 1			
LCS Lot-Sample#: A1A120000-102 **Prep Batch #...:** 1012102					
Mercury	92	(77 - 125)	CFR136A 1631E	01/12-01/13/11	MC8011AC
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: A1A070542 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1A120000-102 **Prep Batch #...:** 1012102					
Mercury	92	(77 - 125)	CFR136A 1631E	01/12-01/13/11	MC8011AE
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A070542 **Matrix.....:** WATER
Date Sampled...: 01/06/11 13:00 **Date Received..:** 01/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1A070449-003 **Prep Batch #...:** 1010015							
Mercury	110	(69 - 134)			SW846 7470A	01/10-01/11/11	MC4901AX
	106	(69 - 134)	3.6	(0-20)	SW846 7470A	01/10-01/11/11	MC4901A0
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A070542 **Matrix.....:** WG
Date Sampled...: 01/06/11 08:05 **Date Received..:** 01/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1A070542-011 **Prep Batch #...:** 1012102							
Mercury	82	(71 - 125)			CFR136A 1631E	01/12-01/13/11	MC5XW1AC
	71	(71 - 125)	6.8	(0-24)	CFR136A 1631E	01/12-01/13/11	MC5XW1AD
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica
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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Duke Energy	Mike Wagner	1/5/2011 - 1/6/2011	184225
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 2**
Miami Fort Station	(513) 651-3440		
City	**State**	**Zip Code**	**Site Contact** / **Lab Contact**
N. Bend	OH		~~S. Beckett~~ T. Thomas
Project Name and Location (State)	**Carrier/Waybill Number**		
Miami Fort Station, LL Hg			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
RI FB	1/5/2011	1720		X			2		●					
RI		1725					4		●					
* 601 (7) WWT		1745					4							* = Potentially elevated Hg levels
* 601 (7) WWT Tot		1750							1					
* 601 (7) WWT Tot Dup		1755							1					
608 WWT FB	1/6/2011	0715					2							
608 WWT		0720					4							
608 WWT Dup		0725					4							
608 WWT Diss		0730					4							
Outfall 002 FB		0800					2							
Outfall 002		0805					4							
Outfall 002 Dup		0810		V			4							

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other Standard

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	01-06-11	1130	1. Received By	1-6-11	11:30
2. Relinquished By	1-6-11	1700	2. Received By	7 JAN 2011	0920
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Duke Energy	Project Manager: MIKE WAGNER (URS)	Date: 01-05-2011	Chain of Custody Number: 184226
Address: Miami Fort Station	Telephone Number (Area Code)/Fax Number: 513 651-3440 x 3452	Lab Number:	Page 2 of 2
City: N. Bend / State: OH / Zip Code:	Site Contact: T. Thomas	Lab Contact:	Analysis (Attach list if more space is needed)
Project Name and Location (State): Miami Fort Stn LLNG	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	LLNG
Trip Blank	01-05-11	—		X			2						

Special Instructions/ Conditions of Receipt

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify)

	Date	Time
1. Relinquished By	01-06-11	1130
2. Relinquished By	1-6-11	1300
3. Relinquished By		

	Date	Time
1. Received By	1-6-11	1130
2. Received By TEST AMERICA	7 JAN 2011	0920
3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 440705421
North Canton Facility

Client DUKE ENERGY Project MIAMI FORT By: (Signature)
Cooler Received on 7 JAN 2011 Opened on 7 JAN 2011
FedEx ☒ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other
TestAmerica Cooler # 5026 Multiple Coolers ☐ Foam Box ☐ Client Cooler ☐ Other
1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
If YES, Quantity 1 Quantity Unsalvageable
Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
Were custody seals on the bottle(s)? Yes ☐ No ☒
If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☒ None ☐ Other PLASTIC BAG
6. Cooler temperature upon receipt 3.6 °C See back of form for multiple coolers/temps ☐
METHOD: IR ☒ Other ☐
COOLANT: Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☒
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☐ No ☐ NA ☒
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☒ Were VOAs on the COC? Yes ☐ No ☒
Contacted PM DJP/KWK Date 1/7/11 by JM via Verbal ☒ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:
HIGH TEMP OKAY LLHG
NO ANALYSIS ON COC 184225
Will log 601(7) WWT TOT & 601(7) WWT TOT DUP for total mercury & will log all other samples for LLHG per volume received.

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) 1X250ml EACH HNO3 were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 100110-HNO_3; Sulfuric Acid Lot# 110410-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? 1206, 1212

Client ID	pH	Date	Initials
(7) TOT	<2	7 JAN 2011	MAF
(7) TOT DUP	<2		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

END OF REPORT